



DEPARTMENT OF THE AIR FORCE  
HEADQUARTERS AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

MAY 10 2000

FROM: HQ AFCESA/CES  
139 Barnes Drive  
Tyndall AFB FL 32403-5319

SUBJECT: **Engineering Technical Letter (ETL) 00-7: Fire Protection Engineering Criteria — Correlation of US and Host Nation Codes and Criteria**

**1. Purpose.** This ETL provides guidance for the use and coordination of US codes and criteria with those of a host nation.

**2. Application.** Requirements of this ETL are mandatory for all new projects and all existing facilities on Air Force installations outside the US, its territories, and its possessions.

**Note:** Use of "shall" indicates a mandatory requirement. "May" or "should" indicates a nonmandatory action or condition.

**2.1.** Authority: Air Force Instruction (AFI) 32-1023, *Design and Construction Standards and Execution of Facility Construction Projects*.

**2.2.** Effective Date: Immediately.

**2.3.** Expiration: Five years from date of issue.

**2.4.** Ultimate Recipients:

- MAJCOM Civil Engineering and Fire Protection offices with assets as described in paragraph 2.
- Base Civil Engineering and Fire Protection offices with assets as described in paragraph 2.
- Responsible design and construction agents.

**2.5.** Coordination:

- HQ USAF/ILEC
- MAJCOM Civil Engineering and Fire Protection offices with assets as described in paragraph 2.
- HQ USAFE/CER

**3. Referenced Publications.**

**3.1.** Public Law:

- PL 102-522, *The Federal Fire Safety Act of 1992*

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**3.2. Department of Defense (DoD):**

- MIL-HDBK 1008C (or most current edition), *Fire Protection for Facilities Engineering, Design, and Construction*
- Mil-HDBK 1191, *Medical Military Construction Criteria*

**3.3. National Fire Protection Association(NFPA):**

- *The National Fire Codes*, current editions
- NFPA 101, *The Life Safety Code*, current edition

**3.4. International Conference of Building Officials:**

- *Uniform Building Code*, current edition

**3.5. Host Nation Standards Writing Associations:**

- *Loss Prevention Council Standards, United Kingdom*, current editions

**4. Definitions.**

**4.1. Component:** A single piece of a larger system. Example: Piping is a component of a sprinkler system.

**4.2. Feature:** A single attribute of the fire protection for a given facility. Example: In a dormitory, required features include sprinklers (acting as both suppression and heat detection); a means of egress IAW NFPA 101; and single station smoke detection in the rooms.

**4.3. Host Nation:** A nation in which representatives or organizations of another state are present because of government invitation and/or international agreement.

**Note:** The US is "another state."

**4.4. IAW:** in accordance with.

**4.5. Listed:** Applies to equipment or materials included in a list published by an organization acceptable to the authority with jurisdiction. The organization periodically inspects production and certifies that the items meet appropriate standards or test as suitable for a specific use.

**4.6. Nationally Recognized:** Applies to standards organizations recognized both by the host nation and within the US (see Attachment 1). Example: Fire Insurer's Laboratories of Korea (FILK) is nationally recognized in Korea, and therefore meets the definition.

**4.7. New Construction:** Includes new facilities and facilities requiring changes that are more than cosmetic, such as major renovations and/or additions.

**4.8. System:** A complete and usable configuration of all required components that support a specific process; includes features and design criteria. Examples: A sprinkler system includes piping, heads, valves, pumps, gages, flow detection devices, and alarm reporting. An egress system includes exits, exit access, exit discharge, required means of escape, doors, ramps and stairs, exit markings, and emergency lighting (features); and specified ceiling heights, composition of the egress path, and travel, common path, and dead end distances (design criteria).

**4.9. Tested:** Applies to materials, equipment, or systems tested by a nationally recognized testing laboratory for compliance with nationally recognized tests approved for use by the Air Force.

**4.10. US:** The 50 United States and all territories and possessions.

**4.11. US Codes and Criteria:** Mandatory design and construction standards applied when building a facility on an Air Force base in the US. Examples: Public Law 102-522, *The Federal Fire Safety Act of 1992*; *National Fire Codes*; MIL-HDBK 1008; MIL-HDBK 1191; *Uniform Building Code*.

## **5. Requirements.**

**5.1.** Identify required fire protection/life safety features and their performance standards based on US codes and criteria. Example: Provide automatic sprinklers in dormitories IAW NFPA 101.

**Note:** US Public Law applies to non-US DoD installations unless specifically exempt in the law. It is Air Force practice to provide a comparable level of life safety for Air Force members, employees, or their families, regardless of their location.

**5.2.** Determine if a host nation equivalent exists for the required system installation and its components.

**5.2.1.** If an equivalent exists, use host nation systems/components and installation procedures.

**5.2.2.** If an equivalent does not exist, use US systems/components and installation procedures.

**5.3.** Ensure system components are tested and listed to meet the applicable standard. All components of a required system shall be listed as compatible. All required system interfaces shall be listed as compatible.

**5.4.** Ensure installation practices for required systems are IAW applicable criteria.

**5.4.1.** US components shall be installed IAW US installation practices.

**5.4.2.** Host nation components shall be installed IAW host nation installation practices.

**Note:** For Europe, "host nation components" include those approved by the host nation for use within its borders and accepted as an equivalent. Example: Components from other NATO or European Union (EU) countries may be considered if they are approved by the host nation and meet the equivalency requirement.

## **6. Prohibited Practices.**

**6.1.** Do not mix and match components from different nations within a system unless specifically tested and listed as compatible. Example: Do not use a door and hardware from "nation X" with a frame from "nation Y" unless they have been tested together as a system and listed as passing the tests.

**6.2.** Where codes differ, do not mix and match requirements. DO NOT choose the most stringent requirement for each individual feature/component (see following note).

**Note:** The principle "Always use the most stringent requirement" has been widely misapplied to individual features/components. It correctly applies only to entire systems: "Choose the *system* with the most stringent requirement."

**7. Point of Contact:** Ms. Erin A.M. Oneisom, HQ AFCESA/CESM, DSN 523-6329, commercial (850) 283-6329, FAX 523-6219, or internet [erin.oneisom@afcesa.af.mil](mailto:erin.oneisom@afcesa.af.mil).

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Director of Technical Support

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1. Host Nation Support Information
  - a. Germany
  - b. Italy
  - c. Japan
  - d. Korea
  - e. Turkey
  - f. United Kingdom
2. Distribution List

## Germany

### Testing Laboratories:

Deutsche Montan Technologie

<http://www.fp.dmt.de/Protec/frame.htm>

Physikalisch-Technische Bundesanstalt

<http://www.ptb.de/english/welcome.htm>

<http://www.ptb.de/>

TUV Product Services

VDE VERLAG

[www.vde-verlag.de](http://www.vde-verlag.de)

VDS Schadenverhütung

<http://www.vds.de/Portrait/Portrait1e.htm>

FM Global

<http://www.fmglobal.com/>

UL International Germany GmbH

Frankfurter Strasse 229

63263 Neu-Isenburg

Telephone: 49-6102-254797

Fax: 49-170-9201381

E-mail: [raymond.e.burg@de.ul.com](mailto:raymond.e.burg@de.ul.com)

# Italy

## Testing Laboratories:

FM Global

<http://www.fmglobal.com/>

UL

Centro Direzionale Colleoni

Palazzo Andromeda/3

20041 Agrate Brianza (Milan)

Telephone: 39-039-6057937

Fax: 39-039-651946

E-mail: [info@ulitalia.it](mailto:info@ulitalia.it)

UL International Italia S.r.l

Zona Industriale Preda Niedda

07100 Sassari (Sardinia)

Telephone: 39-0-79-260384

Fax: 39-0-79-260348

E-mail: [ullab@ssnet.it](mailto:ullab@ssnet.it)

# Japan

## Testing Laboratories:

FM Global

<http://www.fmglobal.com/>

UL Japan Co., Ltd.

<http://www.ul.com/global/japan.html>  
[gen@uljapan.co.jp](mailto:gen@uljapan.co.jp)

## Other Resources:

The Building Center of Japan

3-2-2 Toranomon Minato-ku (Tokyo)

Telephone: 81-3-3434-7161

[www.bcj.or.jp](http://www.bcj.or.jp)

Japan Fire Equipment Inspection Institute

4-35-16 Jindaiji Higashi-machi Choufu-Shi (Tokyo)

Telephone: 81-422-44-7471

E-mail: [Jfeil@japan.email.ne.jp](mailto:Jfeil@japan.email.ne.jp)

Hazardous Materials Safety Techniques Association

4-3-13 Toranomon Minato-ku (Tokyo)

Telephone: 81-3-3436-2351

E-mail: [Kyoukai@khk-syoubou.or.jp](mailto:Kyoukai@khk-syoubou.or.jp)

Fire Protection Equipment and Safety Center of Japan

2-9-16 Toranomon Minato-ku (Tokyo)

Telephone: 81-3-3501-7911

[www.fesc.or.jp](http://www.fesc.or.jp)

Tokyo Fire Protection Equipment Conservation Association

81-3 Yarai-cho Shinjuku-ku (Tokyo)

Telephone: 81-3-5261-4155

E-mail: [Tsh@gb3.so-net.or.jp](mailto:Tsh@gb3.so-net.or.jp)

Japan Electrical Construction Association Inc.

1-7-8 Akasaka Minato-ku (Tokyo)

Telephone: 81-3-5413-2161

Japan Fire Retardant Association

4-6-7 Nihonbashi Honmachi Chuou-ku (Tokyo)

Telephone: 81-3-3246-1661

# Korea

## Testing Laboratories:

FM Global

<http://www.fmglobal.com/>

Fire Insurer's Laboratories of Korea (FILK)

UL Korea Ltd

<http://www.ul.com/global/korea.html>

## Other Resources:

Korean Fire Protection Association

<http://www.kfpa.or.kr/>



# Turkey

## Testing Laboratories:

Turkish Standards Institute (TSE)

<http://www.tse.gov.tr>

Middle East Technical University (METU)

<http://www.metu.edu.tr>

Istanbul Technical University of (ITU)

<http://www.itu.edu.tr/>

Bosphorous University (BU)

<http://www.boun.edu.tr/>

FM Global

<http://www.fmglobal.com/>

## Other Resources:

Ilgili Linkler

<http://www.ivak.org.tr/fel.htm>

## United Kingdom

### Testing Laboratories:

LPC

<http://www.thefpa.co.uk/labs/index.htm>

Underwriter's Laboratory (UL)/UL International (U.K.) Ltd

2 Station View

Guildford Surrey GU1 4JY, U.K.

Telephone: 44-1483-302-130/Fax: 44-1483-302-230

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(Engineering Operations)

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Old Portsmouth Road

Guildford, Surrey, GU3 1LR, U.K.

Telephone: 44-1483-302-130/Fax: 44-1483-302-230

[www.ul-uk.com](http://www.ul-uk.com)

(Management System Registration)

30 Chenley Pavillons

Chalkdell Drive

Milton Keynes, MK4 6LB, U.K.

Telephone: 44-1908-522-220/Fax: 44-1908-522-221

E-mail: [uluk@btinternet.com](mailto:uluk@btinternet.com)

Electrical Equipment Certification Services

<http://www.open.gov.uk/hse/eecs/eecshome.htm>

Sira Certification Services

[http://www.sira.co.uk/test\\_cert/](http://www.sira.co.uk/test_cert/)

FM Global

<http://www.fmglobal.com/>

### Other Resources:

Loss Prevention Council (LPC)

<http://www.thefpa.co.uk/>

<http://www.lpc.co.uk/index.html>

## DISTRIBUTION LIST

### DEPARTMENT OF DEFENSE

Defense Commissary Service Director of Facilities Bldg 8400 Lackland AFB TX 78236-5000	(1)	Defense Technical Information Center ATTN: DTIC-FDA Alexandria VA 22034-6145	(1)
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AAFES/ATTN: CFE PO Box 660320 Dallas TX 75266-0320	(1)
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### SPECIAL INTEREST ORGANIZATIONS

IHS (S. Carter) 15 Inverness Way East Stop A-111 Englewood CO 80112	(1)	Construction Criteria Database National Institute of Bldg Sciences 1201 L Street NW, Suite 400 Washington DC 20005	(1)
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